

CLAIMS:

1. An electrostatically atomizing device comprising:

- a liquid storing means for storing a volume of liquid;
- a carrier having a liquid collecting end and a discharge end opposite of said liquid collecting end, said liquid collecting end being immersed within said liquid in said reservoir for collecting and feeding the liquid through said carrier to said discharge end,
- a first electrode electrically charging said liquid,
- a second electrode opposed to said discharge end,
- a voltage source applying a voltage across said first and second electrodes to thereby electrostatically charge the liquid at said discharge end and emitting the said liquid in the form of tiny ionized particles,
- said liquid storing means being accommodated within a housing together with said carrier, said first electrode, said second electrode, and said voltage source, and
- at least a part of said liquid storing means being detachable to said housing.

2. The device as set forth in claim 1, wherein

said liquid storing means comprises a reservoir accommodated within said housing and a replenishing tank for supplying the liquid to said reservoir, said replenishing tank being detachable to said reservoir.

3. The device as set forth in claim 2, wherein

said housing is provided with a recess for accommodating therein said reservoir, said carrier, said first electrode, said second electrode, and said replenishing tank,

said recess being covered with a lid,

said device including a switch that disables said voltage source upon opening of

said lid.

4. The device as set forth in claim 2, wherein said voltage source is accommodated within said housing together with a first contact and a second contact which are detachable to said first and second electrodes respectively for electrically connection thereto, said reservoir being accommodated within a casing together with said carrier, said first electrode, and said second electrodes, said casing being detachable to said housing.

5. The device as set forth in claim 4, wherein said housing has a recess for receiving therein said casing and a lid covering said recess, said device including a switch that disables said voltage source upon opening of said lid.

6. The device in claim 5, wherein said recess being sealed from the interior of said housing where said voltage source is accommodated.

7. The device as set forth in claim 4, wherein said carrier is mounted to a barrel together with said first and second electrodes, said first and second electrodes having first and second terminals for pressed contact respectively with said first and second contacts of said voltage source, said first and second terminals being disposed on opposite of said barrel to receive from said first and contacts respectively contacting forces that counterbalances with each other.

8. An air cleaner including the electrostatically liquid misting device as defined in claim 1, said cleaner including:

said housing provided with a filter for trapping pollutants, and a fan circulating the air through said filter,
said device being disposed in said housing downstream of said fan and said filter.